

POLYBENZAZOLE COMPOUND HAVING SULFO GROUP AND/OR PHOSPHONO GROUP, RESIN COMPOSITION CONTAINING THE SAME, MOLDED RESIN, SOLID POLYMER ELECTROLYTE FILM, SOLID ELECTROLYTE FILM/ELECTRODE CATALYST LAYER COMPOSITE, AND PROCESS FOR PRODUCING THE COMPOSITE

Patent number: EP1354907

Publication date: 2003-10-22

Inventor: SAKAGUCHI YOSHIMITSU (JP); KITAMURA KOTA (JP); TAGUCHI HIROAKI (JP); NAKAO JUNKO (JP); HAMAMOTO SHIRO (JP); TACHIMORI HIROSHI (JP); TAKASE SATOSHI (JP)

Applicant: TOYO BOSEKI (JP)

Classification:

- **international:** C08G73/06; H01B1/06; H01B1/12; H01M8/02; H01M8/10; C08G73/22; C08G61/12

- **europaen:** C08G61/12; C08G73/22; H01B1/12F; H01M8/10E2

Application number: EP20010982763 20011112

Priority number(s): WO2001JP09885 20011112; JP20000345604 20001113; JP20000345606 20001113; JP20000348327 20001115; JP20000348328 20001115; JP20010001615 20010109; JP20010002661 20010110; JP20010101021 20010330; JP20010101022 20010330

Also published as:



WO0238650 (A1)

US2004062969 (A1)

Cited documents:



US4634530

WO0101506

Report a data error here

Abstract of EP1354907

An object of the present invention is to obtain a novel polymeric material capable of forming a solid polymer electrolyte excellent not only in processability, solvent resistance and durability/stability but also in ion conductivity by introducing sulfonic acid group or phosphonic acid group into a polybenzazole compound having excellent properties in view of heat resistance, solvent resistance, mechanical characteristics and the like. <??>Means attaining the object of the present invention is a polybenzazole compound including an aromatic dicarboxylic acid bond unit having sulfonic acid group and/or phosphonic acid group and satisfying either a condition that inherent viscosity measured in concentrated sulfuric acid is in the range of 0.25 to 10 dl/g or a condition that inherent viscosity measured in a methanesulfonic acid solution is in the range of 0.1 to 50 dl/g. <??>The object of the present invention can be attained also by a resin composition containing the aforementioned polybenzazole compound, a resin molding, a solid polymer electrolyte membrane, a solid polymer electrolyte membrane/electrode assembly and a method of preparing the solid polymer electrolyte membrane/electrode assembly.

Data supplied from the esp@cenet database - Worldwide